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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,501	07/28/2003	Yong Li	IR-2316 (2-3605)	5067
7590 01/10/2006 OSTROLENK, FABER, GERB & SOFFEN 1180 Avenue of the Americas New York, NY 10036-8403			EXAMINER BERHANE, ADOLF D	
			ART UNIT 2838	PAPER NUMBER

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/628,501	LI ET AL.	
	Examiner	Art Unit	
	Adolf Berhane	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,20-29,31,32 and 34-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 20-26,28,29,31,34-36 and 38 is/are rejected.
- 7) ☒ Claim(s) 27,32,37 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 31 is objected to because of the following informalities: Claims 31 depends upon a canceled claim 30. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 20-26, 28, 29, 31, 34-36 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Rozman et al. (5,438,502).

Rozman et al. disclose a VSCF system with voltage estimation in Figs. 2 and 3. An input power conditioning unit adapted for connection to an input power source (18), a power control unit (24), a rectification circuit (12), first sensor (40, 42), second sensor (26), an estimator circuit (45), load (22), bus capacitor (14) coupled to an input of the power inverter (18), obtaining an indication of input power (40, 42), obtaining an indication of output power (26), controlling a power conversion unit (24).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 20-22, 24-26, 28, 29, 31, 34-36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojori et al. (6,850,426) in view of Rozman et al. (5,438,502).

Kojori et al. disclose the claimed invention except for a rectification circuit. Rozman et al. teach the use of a rectification circuit in Figs. 1 and 2. Kojori et al. disclose a synchronous and bidirectional variable frequency power conversion systems in Fig. 1C. An input power conditioning unit adapted for connection to and input power source (3), a power control unit (2), first sensor (102), second sensor (120), load (903), bus capacitor (1) coupled to an input of the power inverter (3), obtaining an indication of input power (102), obtaining an indication of output power (120), controlling a power conversion unit (3). It would have been obvious to one having ordinary skill in the art at the time of the invention to provide a rectification circuit as taught by Rozman et al. in Kojori et al. power conversion system in order to provide a DC power source to the power conversion bridge in case the DC power source (DC power OUT/IN) is unable to provide the required input DC power.

Allowable Subject Matter

6. Claim 10 is allowed over the cited prior art.
7. Claims 27, 32, 37 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed 12/21/05 have been fully considered but they are not persuasive. Applicant argues that both Kojori and Rozman are not concern with applicant's problem and solution to that problem. However, the mere fact that the references relied on by the Examiner fail to evince an appreciation of the problem identified and solved by the Applicants is not, standing alone, the conclusive evidence of the nonobviousness of the claimed subject matter.


With respect to Applicant's argument that Kojori fails to disclose a first and second sensor that provide a signal indicative of the DC and AC power drawn. Applicant's attention is directed to Fig. 1C, which shows a first sensor (102), second sensor (120) and provides signals indicative of power to the signal isolation and conditioning circuit (104). With respect to Applicant's argument that Rozman fails to disclose a first and second sensor that provide a signal indicative of the DC and AC power drawn. Applicant's attention is directed to Fig. 2, which shows a first sensor (40 and 42), second sensor (26) and provides signals indicative of power to the voltage estimator (45).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adolf Berhane whose telephone number is 571-272-2077. The examiner can normally be reached on Monday- Friday 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Adolf Bernane
Primary Examiner
Art Unit 2838